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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Office	Action Summary	Part of Paper No./Mail Date 20070831			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application			
Attachment(s)					
* See the attached detailed Office action for a list of the certified copies not received.					
application from the International Bureau (PCT Rule 17.2(a)).					
<ul> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>					
1. Certified copies of the priority documents have been received.					
a) All b) Some * c) None of:					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
Priority under 35 U.S.C. § 119					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Application Papers					
8) Claim(s) are subject to restriction and	l/or election requirement.				
6)⊠ Claim(s) <u>1-50</u> is/are rejected. 7)□ Claim(s) is/are objected to.					
5) Claim(s) is/are allowed.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
4)⊠ Claim(s) <u>1-50</u> is/are pending in the application.					
Disposition of Claims					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.					
1) Responsive to communication(s) filed on 27	June 2007.				
Status					
WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions a reply within the set or extended period for reply will, by state that the provision of the mail of the	DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO ute, cause the application to become A	ICATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
A SHORTENED STATUTORY PERIOD FOR REF	PLY IS SET TO EXPIRE 3 N	MONTH(S) OR THIRTY (30) DAVS			
The MAILING DATE of this communication a Period for Reply	_	vith the correspondence address			
	David E. England	2143			
Office Action Summary	09/219,071 Examiner	HEADLEY ET AL.  Art Unit			
	Application No.	Applicant(s)			

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### **DETAILED ACTION**

1. Claims 1 - 50 are presented for examination.

## **Drawings**

2. The drawings were received on 06/27/2007. These drawings are acceptable.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-7, 12-14, 17, 24-27, 29, 31, 40 and 44-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux (6182110) in view of Li et al. (5596750) (hereinafter Li).
- 5. Referencing claim 1, as closely interpreted by the Examiner, Barroux teaches a job scheduling device for scheduling jobs to run on at least two nodes of at least one computing platform, comprising:
- 6. an enterprise scheduling agent installed on each of the at least two nodes and configured to:

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7. access the job information maintained by a job repository, (e.g. col. 4, lines 15 – 27, "hosts 218 and 220, RPC daemon 222 and agents");

- 8. determine when to execute each job submitted to the node where the local job repository is installed, (e.g. col. 4, lines 15 27, "hosts 218 and 220, RPC daemon 222 and agents" & Figure 6C); and
- 9. launch execution of each job submitted to the node based on the determination, (e.g. col. 1, line 59 col. 2, line 9 & col. 4, lines 15 27, "hosts 218 and 220, RPC daemon 222 and agents" & Figure 2);
- 10. a presentation system configured to accept and validate parameters identifying at least one job to be submitted for execution on at least one of the nodes, (e.g. col. 5, lines 28 44, "... one scheduling information parameter may correspond to surveying a particular subnet using SNMP probe system..."); and
- 11. a job scheduler configured to allocate at least one job based on the parameters to at least one of the nodes and to submit the allocated jobs to the at least one of the nodes, (e.g. col. 1, line 59 col. 2, line 9 & col. 4, lines 15 27, "integrated resource 200 queries this database and computes a schedule of tasks to be executed");
- 12. wherein the job scheduler is communicatively coupled to the at least two nodes by a network, (e.g. col. 1, line 59 col. 2, line 9 & col. 4, lines 15 27, "integrated resource 200 queries this database and computes a schedule of tasks to be executed" & Figure 2).
- 13. Barroux does not specifically teach at least two local job repositories, each local job repository installed on a separate one of the at least two nodes and each local job repository configured to maintain job information on each job submitted to the node where the local job

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repository is installed, the job information including job parameters needed to execute each job;

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and

14. at least two enterprise scheduling agents, each enterprise scheduling agent installed on a

separate one of the at least two nodes and each enterprise scheduling agent configured to:

15. access the job information maintained by the local job repository.

16. Li teaches at least two local job repositories, each local job repository installed on a

separate one of the at least two nodes and each local job repository configured to maintain job

information on each job submitted to the node where the local job repository is installed, the job

information including job parameters needed to execute each job, (e.g., col. 10, line 20 - col. 11,

line 23); and

17. at least two enterprise scheduling agents, each enterprise scheduling agent installed on a

separate one of the at least two nodes and each enterprise scheduling agent configured to:

18. access the job information maintained by the local job repository, (e.g., col. 10, lines 20

-62). It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine the teachings of Li with Barroux because utilizing a local repository would

give the system a local queue to hold information and tasks to be performed in an order and not

have the continually request tasks from a central location. Furthermore, storing tasks locally

would give the system the ability to read and write information locally and not have to

continually request, read and write information on another system.

19. Furthermore, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to have multiple enterprise scheduling agents and local job

repositories, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

- 20. Referencing claim 2, as closely interpreted by the Examiner, Barroux teaches a job data management device configured to maintain job data and job histories of jobs submitted to each of the nodes, (e.g. col. 9, lines 13 23 & col. 11, lines 16 48).
- 21. Referencing claim 3, as closely interpreted by the Examiner, Barroux teaches the job histories include information received from each enterprise scheduling agent regarding status of the jobs submitted, (e.g. col. 11, lines 16-48).
- 22. Referencing claim 4, as closely interpreted by the Examiner, Barroux teaches the job data management device is utilized by said job scheduler to set parameters in jobs to be submitted to each of the nodes, (e.g. col.1, line 59 col. 2, line 9 & col. 4, line 66 col. 5, line 44).
- 23. Referencing claim 5, as closely interpreted by the Examiner, Barroux teaches a job history repository that saves both jobs and job histories of jobs submitted to each enterprise scheduling agent, (e.g. col. 9, lines 5 40);
- 24. wherein each enterprise scheduling agent comprises,
- 25. an agent communicator configured to send and receive messages between the job scheduler and the enterprise scheduling agent, (e.g. col. 3, line 60 col. 4, line 36),

- 26. a job manager configured to setup, launch, run, and manage jobs submitted to the enterprise scheduling agent, a data manager configured to update and delete data from the job history repository, (e.g. col. 7, line 61 col. 8, line 10), and
- 27. a low level API configured to handle internal functions of the enterprise scheduling agent, file management, and message handling functions, (e.g. col. 3, line 43 col. 4, line 15).
- 28. Referencing claim 6, as closely interpreted by the Examiner, Barroux teaches an enterprise communicator configured to construct and communicate messages between the job scheduler and each enterprise scheduling agent, (e.g. col. 18, line 40 col.19, line 3); and
- 29. a job data management device configured to maintain job histories of jobs submitted to each enterprise scheduling agent, (e.g. col. 3, line 60 col. 4, line 36);
- 30. wherein said data manager updates the job history via enterprise communicator messages sent from each enterprise scheduling agent to said job data management device, (e.g. col. 11, lines 16-38).
- Referencing claim 7, as closely interpreted by the Examiner, Barroux teaches a command line device configured to accept commands regarding administration of jobs submitted to at least one of the nodes, (e.g. col.15, line 57 col. 16, line 67); and
- a job administration device configured to communicate the command line to the enterprise scheduling agent installed on the at least one of the nodes for execution, (e.g. col.15, line 57 col. 16, line 67).

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33. Referencing claim 12, as closely interpreted by the Examiner, Barroux teaches an enterprise communicator configured to send messages between the job scheduler and each enterprise scheduling agent, (e.g. col. 13, line 61 – col. 14, line 55).

- 34. Referencing claim 13, as closely interpreted by the Examiner, Barroux teaches each enterprise scheduling agent is registered at a specific node address that identifies each enterprise scheduling agent with a unique datagroup, (e.g. col. 15, line 42 col. 16, line 13); and
- 35. the enterprise communicator encodes each message with at least one destination corresponding to a datagroup to direct each message to at least one enterprise scheduling agent, (e.g. col. 15, line 42 col. 16, line 13).
- 36. As per claim 14, as closely interpreted by the Examiner, Barroux dose not specifically teach wherein:
- 37. each local job repository maintains job and job history information on each job submitted to the node where the local job repository is installed;
- 38. each local job repository is updated by the enterprise scheduling agent installed on the node where the local job repository is installed.
- 39. Li teaches each local job repository maintains job and job history information on each job submitted to the node where the local job repository is installed, (e.g. col. 10, lines 4 19);
- 40. each local job repository is updated by the enterprise scheduling agent installed on the node where the local job repository is installed, (e.g. col. 10, lines 4 19).

- 41. It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with Barroux because it would be more efficient for a system to keep records of jobs that have been completed so a user can view or a system can read the history to find any errors, making error detection easier.
- 42. Referencing claim 17, as closely interpreted by the Examiner, Barroux teaches an auto login device configured to accept login parameters from a user submitting a job, (e.g. col. 15, line 57 col. 16, line 14);
- 43. wherein the login parameters are utilized by each enterprise scheduling agent to launch and execute the job submitted, (e.g. col. 15, line 57 col. 16, line 14).
- 44. Referencing claim 19, as closely interpreted by the Examiner, Barroux teaches the presentation system includes,
- 45. a GUI interface that accepts user inputs for scheduling and specifying a job to be submitted, (e.g. col. 15, line 57 col. 16, line 13& Figs. 6A 6D);
- 46. wherein the GUI interface includes facilities for selection and creation of a scheduling calendar, selection of a start date and time, selection of recurring job run intervals, and selection of an immediate job run, (e.g. col. 15, line 57 col. 16, line 13 & Figs. 6A 6D).
- 47. Referencing claim 24, as closely interpreted by the Examiner, Barroux teaches the presentation system includes, a strategy scheduling window configured to allow a user to view, create, modify, and delete schedules for a strategy, (e.g. col. 7, lines 4-9).

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- 48. Referencing claim 25, as closely interpreted by the Examiner, Barroux and Li teach all that is similarly found in claim 1 herein out and Barroux further teaches determining, at a first location, at least one job to be scheduled based on job parameters for the at least one job, (e.g. col. 1, line 59 col. 2, line 9 & col. 4, lines 15 27, "hosts 218 and 220, RPC daemon 222 and agents" & Figure 2 & col. 3, line 60 col. 4, line 14 & col. 6, lines 5 59);
- based on the determinations, executing the at least one job on the at least two nodes under management of the enterprise scheduling agents, (e.g. col. 3, line 42 col. 4, line 30 & col. 7, lines 4 9);
- 50. wherein the first location is communicatively coupled to the at least two node by a network, (e.g. col. 3, line 60 col. 4, line 14 & col. 6, lines 5 59).
- From Referencing claim 26, as closely interpreted by the Examiner, Barroux teaches monitoring progress of each job executing on the at least two nodes, (e.g. col. 19, lines 45 67); and
- 52. displaying the progress on a progress monitor, (e.g. col. 8, lines 50 56).
- Referencing claim 27, as closely interpreted by the Examiner, Barroux teaches recording each job and a history of each job in a job history repository, (e.g. col. 11, lines 16 38 & col. 18, line 57 col. 19, line 3).

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Referencing claim 31, as closely interpreted by the Examiner, Barroux teaches retrieving the job parameters from one of a product and a user interface that collects the job parameters, (e.g. col. 4, lines 37 - 64);

- 55. validating the job parameters, (e.g. col. 4, lines 37 64); and
- 56. allocating a job based on the job parameters, (e.g. col. 5, lines 28 44).
- Referencing claim 40, as closely interpreted by the Examiner, Barroux teaches accepting a scheduling calendar identifying at least one of an execution time and an interval for at least one of the jobs, (e.g. col. 4, lines 15 27); and
- 58. executing the jobs on the at least two nodes at the time and interval identified in the calendar, (e.g. col. 4, lines 15 27).
- 59. Claims 44 50 are rejected for similar reasons as stated above.
- 60. Claims 8, 9, 15, 18, 20, 21, 28 30 and 32 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux and Li as applied to claims 1 & 25, and in view of Williams et al. (5781908) (hereinafter Williams).
- As per claim 8, as closely interpreted by the Examiner, Barroux and Li do not specifically teach the commands accepted by the command line device include at least one of delete a job and all runs of the job, cancel a job's run, list all jobs, list all jobs by at least one of product code, status, and node, and rerun a job immediately.

- 62. Williams teaches the commands accepted by the command line device include at least one of delete a job and all runs of the job, cancel a job's run, list all jobs, list all jobs by at least one of product code, status, and node, and rerun a job immediately, (e.g. col.6 line 59 col. 8, line 36). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because it would be more convenient for a system to utilize editing functions of jobs so a user can interact with how a job can be processed or to delete a process that is no longer needed.
- 63. As per claim 9, as closely interpreted by the Examiner, Barroux and Li do not specifically teach the commands accepted by said command line device include context variables; and
- 64. each enterprise scheduling agent converts the context variables according to a current job and job parameters, and executes the commands. Williams teaches the commands accepted by said command line device include context variables, (e.g. col.6 line 59 col. 8, line 36); and
- 65. each enterprise scheduling agent converts the context variables according to a current job and job parameters, and executes the commands, (e.g. col.6 line 59 col. 8, line 36). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because of similar reasons stated above.
- 66. As per claim 15, as closely interpreted by the Examiner, Barroux does not specifically teach a job data management device configured to maintain job histories of jobs submitted to each of the nodes; and

- 67. a synchronizing device configured to synchronize each local job repository with the job histories maintained by the job data management device.
- 68. Li teaches a job data management device configured to maintain job histories of jobs submitted to each of the nodes, (e.g. col. 10, lines 4 19); and
- 69. a synchronizing device configured to synchronize each local job repository with the job histories maintained by the job data management device, (e.g. col. 8, lines 26 43). It would have been obvious to one skilled in the art at the time the invention was make to combine Li and Williams with Barroux because it would be more efficient of a system to update the history of jobs so if job information becomes obsolete a user can update the job information and use the new data that would be more substantial to the user rather then out dated job information.
- 70. As per claim 18, as closely interpreted by the Examiner, Barroux and Li do not specifically teach a notification scripting device configured to execute a notification script having instructions for notifying a user of status of a submitted job;
- 71. wherein the notification scripting device includes facilities for creating, editing, and selecting a notification script for a specific job. Williams teaches a notification scripting device configured to execute a notification script having instructions for notifying a user of status of a submitted job, (e.g. col. 6, lines 48 67);
- 72. wherein the notification scripting device includes facilities for creating, editing, and selecting a notification script for a specific job, (e.g. col. 7, lines 2-26). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because it would be more efficient if a user could monitor

the job as it is being processed so to make any modification and/or aid in the detection of errors that could occur in the system.

- 73. As per claim 20, as closely interpreted by the Examiner, Barroux and Li do not specifically teach a resource management device configured to enable a user to locate and view jobs and job runs. Williams teaches a resource management device configured to enable a user to locate and view jobs and job runs, (e.g. col. 8, lines 26 43). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because of similar reasons stated above.
- 74. As per claim 21, as closely interpreted by the Examiner, Barroux teaches the resource management device includes a GUI for defining an object representing a job,
- 75. having,
- 76. a general properties page having input fields for a label identifying the job, and a description of the job, (e.g. col. 7, lines 4 10 & Figures 6A 6D), and
- a repository page having a selection field for identifying a time zone for display of job times, (e.g. col. 7, lines 4 10 & Figures 6A 6D). Barroux and Li do not specifically teach a description properties page having a selection field for identifying an icon for representing the job. Williams teaches a description properties page having a selection field for identifying an icon for representing the job, (e.g. col. 8, lines 26 43). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine

teachings of Barroux and Li because it would be more convenient for a system to have an icon that a user could click on and have a GUI appear with information about a specific job.

- 78. As per claim 28, as closely interpreted by the Examiner, Barroux and Li do not specifically teach teaches utilizing a job data management device for, retrieving status messages regarding each job sent from each enterprise scheduling agent, and
- 79. updating said job history repository based on said status messages. Williams teaches utilizing a job data management device for, retrieving status messages regarding each job sent from each enterprise scheduling agent, and
- 80. updating said job history repository based on said status messages, (e.g. col. 3, lines 30 35 & col. 4, lines 30 59). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because for similar reasons as stated above.
- 81. As per claim 29, as closely interpreted by the Examiner, Barroux does not specifically teach maintaining, at each of the local job repositories job history information for each job submitted to the node where the local job repository is installed. Li teaches maintaining, at each of the local job repositories job history information for each job submitted to the node where the local job repository is installed, (e.g. col. 11, lines 16 38). It would have been obvious to one skilled in the art at the time the invention was make to combine Li with Barroux because of similar reasons stated above.

- 82. As per claim 32, as closely interpreted by the Examiner, Barroux and Li do not specifically teach packaging the job parameters in a communication format; and
- 83. transmitting the packaged job parameters from a computing platform where the job parameters are determined to the at least nodes. Williams teaches packaging the job parameters in a communication format, (e.g. col. 8, lines 26 43); and
- 84. transmitting the packaged job parameters from a computing platform where the job parameters are determined to the at least nodes, (e.g. col. 7, lines 26 43). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because it would be more convenient for a system to utilize a communication format that is standard for the internet and if a scheduling agent is on a different system it would be efficient for a system to be able to send the information the agent needs to accomplish its job.
- 85. As per claim 33, as closely interpreted by the Examiner, Barroux and Li do not specifically teach setting up the at least two nodes to run an application program identified by the job parameters;
- 86. executing the application program on the at least two nodes; and
- 87. monitoring progress of the application being executed on the at least two nodes. Williams teaches setting up the selected node to run an application program identified by the job parameters, (e.g. col. 3, lines 3 35);
- 88. executing the application program on the selected nodes, (e.g. col. 3, lines 3 35); and

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89. monitoring progress of the application being executed on the selected nodes, (e.g. col. 4, line 30 – col. 5, line 9). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because it would be more efficient if the system could monitor activity on a node that is running a job so to examine any occurrences that could happen in a system and intervene and/or make record of if necessary.

- 90. As per claim 34, as closely interpreted by the Examiner, Barroux and Li do not specifically teach accepting a command line for administration of a job submitted to at least one of the enterprise scheduling agents; and
- 91. communicating the command line to the at least one of the enterprise scheduling agents for execution. Williams teaches accepting a command line for administration of a job submitted to at least one of the enterprise scheduling agents, (e.g. col. 6, line 59 col. 7, line 10); and
- 92. communicating the command line to the at least one of the enterprise scheduling agents for execution, (e.g. col. 7, line 62 col. 8, line 25). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because of similar reasons as stated above.
- As per claim 35, as closely interpreted by the Examiner, Barroux and Li do not specifically teach substituting context variables in the command line with data based on the context variable and the job to be administered; and

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94. executing the command line. Williams teaches substituting context variables in the command line with data based on the context variable and the job to be administered, (e.g. col. 7, line 3 – col. 8, line 36); and

- 95. executing the command line, (e.g. col. 7, line 3 col. 8, line 36). It would have been obvious to one skilled in the art at the time the invention was make to combine Williams with the combine teachings of Barroux and Li because it would be more convenient if the system could substitute context variables and said command line with data based on said content variable so a user could utilize a spread sheet type outline of the variable for the jobs that are being processed.
- 96. Claim 30 is rejected for similar reasons as stated above.
- 97. Claims 10, 11 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux and Li as applied to claims 1 & 25, and in further view of Shroyer (6160988).
- 98. As per claim 10, as closely interpreted by the Examiner, Barroux and Li do not specifically teach the use of a point product device configured to provide a communication link between each enterprise scheduling agent and at least one product submitting jobs to the job scheduling device;
- 99. wherein the point product device communicates job status, job logfile, setup, cancel, job parameter functions, and requests between each enterprise scheduling agent and the at least one product.

- 100. Shroyer does teach the use of a point product device configured to provide a communication link between each enterprise scheduling agent and at least one product submitting jobs to the job scheduling device, (e.g. col. 18, lines 28 45);
- 101. wherein the point product device communicates job status, job logfile, setup, cancel, job parameter functions, and requests between each enterprise scheduling agent and the at least one product, (e.g. col. 18, lines 28 45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Shroyer with the combine teachings of Barroux and Li because the more parameters a job has to distinct itself the less likely a user will mistake it for a different job that has similar parameters. Also if a device or user needs to update a parameter, the device or user would want the parameters transferable to their node.
- 102. As per claim 11, as closely interpreted by the Examiner, Barroux teaches a job administration device configured to accept command line inputs and communicate the command line inputs to at least one enterprise scheduling agent, (e.g. col. 18, line 40 col. 19, line 3);
- 103. a job data management device configured to maintain job histories of jobs submitted to each of the nodes, (e.g. col. 3, line 60 col. 4, line 36); and
- 104. an enterprise communicator configured to send messages between at least one of said job scheduler, point product device, job administration device, and job data management device and each enterprise scheduling agent, (e.g. col. 14, lines 14 29).

- 105. As per claim 36, as closely interpreted by the Examiner, Barroux and Li do not teach communicating data, including at least one of job status, job logfile, setup, cancel, job parameter functions, and requests for the data between a product and each enterprise scheduling agent.

  106. Shroyer teaches communicating data, including at least one of job status, job logfile, setup, cancel, job parameter functions, and requests for the data between a product and each enterprise scheduling agent, (e.g. col. 18, lines 28 45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Shroyer with the combine teachings of Barroux and Li because the user or a device that needs the parameters, would want them transferable to there node.
- 107. Claims 16 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux and Li as applied to claims 1 & 25, and in further view of Jerome et al. (6323882) (hereinafter Jerome).
- 108. As per claim 16, as closely interpreted by the Examiner, Barroux and Li do not specifically teach a progress monitor configured to monitor and display execution of at least one of the jobs; wherein:
- 109. the progress monitor provides a visual display of, an identification of the job and a current phase of the job, a percentage complete of the job, and a percentage complete of the current phase. Jerome teach a progress monitor configured to monitor and display execution of at least one of the jobs; wherein:

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110. the progress monitor provides a visual display of, an identification of the job and a current phase of the job, a percentage complete of the job, and a percentage complete of the

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current phase, (e.g. col. 10, line 51 – col. 11, line 15). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to combine Jerome with the combine

teachings of Barroux and Li because it allows the users to have a more defined view of how the

jobs are being operated on.

icon selected to represent the job; and

111. As per claim 41, as closely interpreted by the Examiner, Barroux and Li do not teach providing a description of at least one of the jobs, including a written description, a label, and an

112. identifying a time zone for display of job times. Jerome teaches providing a description of at least one of the jobs, including a written description, a label, and an icon selected to represent the job, (e.g. col. 9, lines 15 - 38); and

- 113. identifying a time zone for display of job times, (e.g. col. 9, lines 39 65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Jerome with the combine teachings of Barroux and Li because it allows the users to have a more defined view of how the jobs are being operated on.
- 114. Claims 22, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux and Li as applied to claims 1 & 25, and in further view of Bromley et al. (5819263) (hereinafter Bromley).

- 115. As per claim 22, as closely interpreted by the Examiner, Barroux and Li do not teach objects defined by the resource management device comprise,
- a hierarchy of folders including at least one of an all jabs folder, a jobs by group folder, a job by node folder, a jobs by product folder, a jobs by type folder, and a jobs by user folder.

  Bromley teaches objects defined by the resource management device comprise,
- 117. a hierarchy of folders including at least one of an all jabs folder, a jobs by group folder, a job by node folder, a jobs by product folder, a jobs by type folder, and a jobs by user folder, (e.g. col. 15, lines 30 47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bromley with the combine teachings of Barroux and Li because it would keep all the information that needs to be saved in an organized manner.
- 118. As per claim 42, as closely interpreted by the Examiner, Barroux and Li do not teach placing information about job times and status in an object containing folders, each folder identifying a categorization of jobs contained therein, including, an all jobs folder, a jobs by group folder, a jobs by node folder, a jobs by product folder, a jobs by type folder, and a jobs by user folder. Bromley teaches placing information about job times and status in an object containing folders, each folder identifying a categorization of jobs contained therein, including, an all jobs folder, a jobs by group folder, a jobs by node folder, a jobs by product folder, a jobs by type folder, and a jobs by user folder, (e.g. col. 15, lines 30 47). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bromley with the combine teachings of Barroux and Li because it would keep all the information that needs to be saved in an organized manner.

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- 119. As per claim 43, as closely interpreted by the Examiner, Barroux and Li do not teach organizing the all jobs folder to maintain additional folders, including, at least one of, an all jobs any status folder listing jobs regardless of status and associated job history of each job,
- 120. an all runs by status folder listing jobs according to status, including completed runs, failed runs, not started runs, preempted runs, running runs, and stopped runs,
- 121. a held jobs folder listing jobs that are held and can be scheduled for a later time, and a scheduled jobs folder listing jobs that are scheduled to run. Bromley teaches organizing the all jobs folder to maintain additional folders, including, at least one of, an all jobs any status folder listing jobs regardless of status and associated job history of each job, (e.g. col. 15, lines 30 47),
- 122. an all runs by status folder listing jobs according to status, including completed runs, failed runs, not started runs, preempted runs, running runs, and stopped runs, (e.g. col. 16, lines 2 20),
- 123. a held jobs folder listing jobs that are held and can be scheduled for a later time, and a scheduled jobs folder listing jobs that are scheduled to run, (e.g. col. 16, lines 35 30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Bromley with the combine teachings of Barroux and Li because it would keep all the information that needs to be saved in an organized manner.

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- 124. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux, Li and Bromley as applied to claims 1 & 20 22, and in further view of Russell et al. (5537550) (hereinafter Russell).
- 125. As per claim 23, as closely interpreted by the Examiner, Barroux, Li and Bromley do not specifically teach the all jobs folder includes folders, including, an all jobs any status folder listing jobs regardless of status and associated job history of each job, an all runs by status folder listing jobs according to status,
- 126. including completed runs, failed runs, not started runs, preempted runs, running runs, and stopped runs, a held jobs folder listing jobs that are held and can be scheduled for a later time,
- 127. and a scheduled jobs folder listing jobs that are scheduled to run. Bromley and Russell teaches folders, including, an all jobs any status folder listing jobs regardless of status and associated job history of each job, an all runs by status folder listing jobs according to status, (e.g. Bromley, col. 15, lines 30 62),
- 128. including completed runs, failed runs, not started runs, preempted runs, running runs, and stopped runs, (e.g. Russell, col. 13, line 62 col. 14, line 14),
- 129. a held jobs folder listing jobs that are held and can be scheduled for a later time, and a scheduled jobs folder listing jobs that are scheduled to run, (e.g. Bromley, col. 15, lines 30 62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Russell with the combined system of Barroux, Li and Bromley because of the visual convenience of seeing a folder with information as apposed to a database.

130. Claims 37 – 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barroux and Li as applied to claim 25, and in further view of Russell et al. (5537550).

- 131. As per claim 37, as closely interpreted by the Examiner, Barroux and Li do not teach registering each enterprise scheduling agent at a node address that identifies the registered enterprise scheduling agent with a unique datagroup;
- 132. communicating jobs and job administration commands and requests with each enterprise scheduling agent via messages; and
- 133. encoding each message sent to a recipient enterprise scheduling agent with at least one destination corresponding to a datagroup that directs the message to the recipient enterprise scheduling agent. Russell teaches registering each enterprise scheduling agent at a node address that identifies the registered enterprise scheduling agent with a unique datagroup, (e.g. col. 13, line 62 col. 14, line 14);
- 134. communicating jobs and job administration commands and requests with each enterprise scheduling agent via messages, (e.g. col. 10, lines 1 33); and
- 135. encoding each message sent to a recipient enterprise scheduling agent with at least one destination corresponding to a datagroup that directs the message to the recipient enterprise scheduling agent, (e.g. col. 28, lines 10-27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Russell with the combine teachings of Barroux and Li because it is more efficient to send specific messages or jobs to a specific group that deals with a specific job this would free up time and space for other messages or jobs to be processed on other nodes.

- 136. As per claim 38, as closely interpreted by the Examiner, Barroux and Li do not teach retrieving auto login parameters from a user scheduling an auto login job; and
- 137. launching execution of the job utilizing the auto login parameters. Russell teaches retrieving auto login parameters from a user scheduling an auto login job, (e.g. col. 45, lines 10 27); and
- launching execution of the job utilizing the auto login parameters, (e.g. col. 45, lines 10 27). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Russell with the combine teachings of Barroux and Li because of the convenience of the user not having to login parameters manually.
- 139. As per claim 39, as closely interpreted by the Examiner, Barroux and Li do not specifically teach retrieving a notification script for a job being submitted; and
- 140. executing the notification script on at least one of completion of the job and at a requested status point. Russell teaches retrieving a notification script for a job being submitted, (e.g. col. 6, lines 21 61); and
- 141. executing the notification script on at least one of completion of the job and at a requested status point, (e.g. col. 6, lines 21 61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Russell with the combine teachings of Barroux and Li because it is an efficient way for a user to acknowledge another job completion or status therefore, allowing a user to assign another specific job to the same node or group.

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Response to Arguments

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142. Applicant's arguments, see Remarks, filed 06/27/2007, with respect to claim Objections

and 112 Rejections have been fully considered and are persuasive. The claim Objections and

112 Rejections have been withdrawn.

143. Applicant's arguments filed 06/27/2007 have been fully considered but they are not

persuasive.

144. In the Remarks, Applicant argues in substance that the combination of Barroux with Li,

as proposed by the Examiner, is improper. As described above, using the system described in Li,

tasks are performed by individual users who receive task assignment messages from a server. In

contrast, the intended purpose of Barroux is to overcome the inadequacies of systems like that

disclosed in Li, which require the use of "skilled labor" to perform tasks at the nodes. Barroux

attempts to overcome these inadequacies by automating the scheduling and performance of these

tasks. (See Column 1, Lines 25-42 and 50-52; Column 2, Lines 23-25). Accordingly, the

proposed combination of Barroux with Li would render Barroux unsatisfactory for its intended

purpose.

145. As to the first Remark, Applicant is asked to draw their attention to the prior art of Li,

column 1, lines 20 – 22. In which it states that the agents can be human or automated and

therefore could be used in combination with Barroux under the interpretation of the Applicant.

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- 146. In the Remarks, Applicant argues in substance that the proposed Barroux-Li combination fails to disclose, teach, or suggest: "each enterprise scheduling agent installed on a separate one of the at least two nodes and configured to:.., determine when to execute each job submitted to the node where the local job repository is installed," as recited in Claim 1. Furthermore, the specific use of Barroux only teaches a central scheduler which is not installed on each of the nodes.
- 147. As to the second Remark, Applicant is asked to draw their attention to the above rejection. For it is Li that teaches each user having an agent installed on their workstation and that their workstation is given a list of tasks to perform from another scheduling agent, column 5, lines 45 et seq. The claim language only states to determine when to execute each job submitted to the node not when to schedule it, i.e. a task is done in the order it was received if a list of tasks is received it is done in that order FIFO, which is well known in the art. Barroux, along with the obviousness of duplicating parts, further aids in the teaching on the claim language as cited above.
- 148. In the Remarks, Applicant argues in substance that the proposed Barroux-Li combination fails to disclose, teach, or suggest: "each enterprise scheduling agent installed on a separate one of the at least two nodes and configured to:.., launch execution of each job submitted to the node based on the determination," as recited in Claim 1.

149. As to the third Remark, the second response to the Remarks also applies to this argument. All that is stated in this limitation is that the tasks that are given to the workstations, are to be executed. The prior art can be read as first come first executed from a list that is sent to the workstations. The combination of Barroux and Li teach the claim language as stated.

150. All other dependent claims fall under the same interpretation and are therefore still rejected for the same reasons.

### Conclusion

151. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. England whose telephone number is 571-272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

> David E. England Examiner Art Unit 2143

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